American Artisan

January-December 1953 - Vol. 90, Nos. 1-12

Published monthly by the Keeney Publishing Company, 6 N. Michigan Ave., Chicago 2, Ill.

This index does not include Equipment Developments; New Literature; What the Associations Are Doing; We Hear That; Appointments—departments appearing regularly in each issue. The Editor's Notebook and What's Happening in each issue include items of news, comments on current events, etc. In the January issue a complete directory section was published covering warm air heating, residential air conditioning and sheet metal products.

A	Bonuses for Job-Time Saved, Pay, by Byron E. Courtney, September	100	Convection Panel System Solves Floor Heating Problem, by R. W. Roose and S. Konzo,	
A Bank Wears Stainless Steel, by E. M. Rains,	Boost Sheet Metal Industry by Winning Pub- lic Support, February	53	March Conventions, Are They Worth Attending?,	64
July	Boot Fitting, Perimeter, by Hugh B. Reid,		January	81
Accent on Training and Selling as Contractors	Boot, Making a Fan-to-Exhaust Stack Boot	80	Convert from Gravity to Year 'Round Condi- tioning, November	66
Accidents, When Is a Dealer Liable for Acci-	Fitting, by Hugh B. Reid, October	96	Converting from Gravity to Forced Warm Air, by T. A. Clark, June.	60
dents?, by Albert W. Gray, August 102	Bradley, Norton, Selecting, Installing Ceiling Diffusers, March	72	Coolers, Selling Evaporative, by Robert S. Ash,	60
Ads Should Suit You, by W. Frank Welch, December	Buchanan, James, Selecting, Installing Ceiling	72	December	62
Advantages of Remote Air Cooled Condenser, December	Budget Cut, What It Will Mean to Heating	12	Cooling Equipment Available This Year, Residential (Complete Packaged Central Units),	
Advantages of Statewide Heating Code, by	and Sheet Metal Men, by Arnold Kruckman, April	47	March Cooling Equipment, Controlling and Protecting, by S. W. Reid, September	52
Parker Lowell, December	Builder's-Eye View of Residential Air Condi-	99	ing, by S. W. Reid, September	60
by Lawrence E. Gichner, November 69	Building Programs Mean Business for Heating	99	Reid, August	66
Air Conditioning Exposition—11th Interna- tional Heating & Ventilating Exposition, Program and Exhibitors, January 133	and Sheet Metal Men, by Arnold Kruckman, June	43	Cooling Equipment Supplying Is Job for Heat- ing Wholesalers, March	89
Program and Exhibitors, January 133			Cooling, How It Was Added to Warm Air	
Air Conditioning, How Heat Wave Affects Sales and Service, by H. G. Gregerson, January	C		Cooling Installations, When Do Title I Loans Cover?, by Arnold Kruckman, October	80
Air Conditioning Pays Its Own Way, May 72	Ceiling Diffusers, Selecting and Installing, by	72	Cover?, by Arnold Kruckman, October Cooling Loads, Don't 'Guesstimate,' by H. C.	41
Air Conditioning Project Homes, July 100	James Buchanan and Norton Bradley, March Ceiling Panels, Heating Homes with, by R. W.		Pierce, May	60
Air Conditioning Sells Homes, February 67 Air Cooled Condensers, December 92	Roose and S. Konzo, February Census, Housing Heating Data, June		Cooling Loads, Measuring, by H. T. Gilkey, D. R. Bahnfleth and R. W. Roose, Sep-	
Air Distributing Data Sheet, System Construc-	Census, Housing Heating Data, July		temper	74
Air Filter Code, by A. Nutting and R. F.	Census, Housing Heating Data, August		Cooling Loads, New Way to Figure, by F. W. Deady, August	56
Logsdon, September 56	Census, Housing Heating Data, October Census, Housing Heating Data, November		Cooling, Residential, Is Our Job, Editorial, December	49
Allow for Default Costs in Contract?, by Albert W. Gray, December	Census, Housing Heating Data, December		Cooling Towers and Evaporative Condensers,	
Angular Take-Off, Making an Exhaust Hood with a Corner, by Hugh B. Reid, June 98	Census, Housing, Summarizes Warm Air Heat- ing Market, May	80	Use of, June	56
Another Milestone, Panel-Convection Heating,	Center Reverse Stack Elbow, Making a, by	122	Cooling Towers, Residential Cooling Equipment Available This Year, July	71
by R. W. Roose and S. Konzo, April 68 Another Step Forward, Editorial, March 51	Hugh B. Reid, January		Cooperative Effort-Mutual Benefit, Editorial, June	55
Answer to a Misinformed Editor, October 76	Charging to Job Costs, June		Copper Roof Flashings Last, March Corrosion at Stainless Steel Welds, Curing,	63
Apprentices, Too Few, a Problem for Industry, by Arnold Kruckman, February	Checking Heating Systems, Editorial, August. Church Has Four-Zone Warm Air System,		September	77
Ash, Robert S., Designing Pad Type Evapora- tive Coolers, September	July	68	Corrosion Film, Contractor Reviews, by Law- rence E. Gichner, July	82
Ash, Robert S., How Evaporative Cooling	Gravity to Forced Warm Air, June	60	Corrosion in Stainless Steel, How to Prevent, by A. R. Stargardter, November	
Ash. Robert S., How to Install Evaporative	Code New Air Filter Code by A Nutting	76	Costs, Estimating Forms Help Forecast Job Costs, by N. J. Biddle, January.	
Coolers, November 78	Code, New Air Filter Code, by A. Nutting and R. F. Logsdon, September	56	Costs Figuring for Heat Pump, March	
Ash, Robert S., How to Size Evaporative Coolers, October	Collector, Mechanical, Eliminates Dust Nui- sance, January	124	Courtney, Byron B., Bonuses for Job-Time	
Ash, Robert S., Many Types of Evaporative Coolers, August	Compares Two Methods of Calculating Energy Consumption, March	63	Saved, September	
Ash, Robert S., Selling Evaporative Coolers,	Condensers, How Condensers Work, May	68	Customer Relations, How to Improve, by Lars-	
ASHVE, "Artisan" Condenses ASHVE Pa-	Condensing Unit, About the, February	40	ton D. Farrar, September	68
ASHVE Reports \$2 Million for Research,	Condensing Unit, 2 Hp, Cools Small Home Effectively, by H. T. Gilkey, D. R. Bahn- fleth and R. W. Roose, July	80	D	
March 63	Constructing Ventilation Systems for Radio- active Work, by W. W. McIntosh, Sep-	80	and the second s	
Associations, Local, Play Important Role, No- vember	active Work, by W. W. McIntosh, Sep- tember	70	Deady, F. W., New Way to Figure Cooling Loads, August	56
В	Constructional Specifications, Data Sheet for Air Distribution System, October	104	Dealer Can Be Sued for Damages, by Albert W. Gray, July	108
	Contract, Can Contract Allow for Default Costs?, by Albert W. Gray, December		Dealer Is Liable for Accidents When?, by	*01
Bahnfleth, D. R., Measuring Actual Cooling Loads, September	Contract, Indefinite, Is No Contract, by Albert		Albert W. Gray, August Dealer Lays Out Year 'Round Systems with Template, by Bruce H. McLain, November	102
Bahnfleth, D. R., 2 Hp Condensing Unit Cools	W. Gray, April	103	Template, by Bruce H. McLain, November Dealer Sells the Farm Market, by B. G. Duer,	
Baker Meel How to Find Perimeter Heat Loss	Albert W. Gray, November	92	December	70
from Slab Floors and Basement Walls, January	Contract, Partial Acceptance Invalidates, by Albert W. Gray, September	98	Dealer Uses for Housing Census, June Decontrol, Pros and Cons, by Arnold Kruck-	
Basement Walls, How to Find Perimeter Heat	Contractor Reviews Corrosion Film, by Law-		man, January	. 39
Loss from, by Meri Baker, J. M. O'Byrne and A. M. Levy, January	Contractor Stays Small But Healthy, January.		Designing a Duct System for a Two Story Home, by S. W. Reid, December	55
Biddle, N. J., Estimating Forms Help Forecast	Contractors Talk About Selling, Perimeter	r	Designing Dust Collecting Systems, by Ernest	0.
Biddle N. L. How to Calculate Overhead,	Controlling Cooling Equipment, by S. W.		E. Zideck, September Designing Pad Type Evaporative Coolers, by Robert S. Ash, September	,
February	Reid, August	. 66		
Biddle, N. J., Must Know Overhead to Gauge True Profits. May	Controlling and Protecting Cooling Equip- ment, by S. W. Reid, September	. 60	Diffusers, Ceiling, Selecting and Installing, by James Buchanan and Norton Bradley, March	7.
Biddle, N. J., Vary Overhead Method to Suit Your Needs, March	Convection-Panel System-Another Step For-	. 64	Display, Novel Sidewalk, Brings in Business, by Robert F. Welch, March	. 7

Double-Barreled Plan for a Successful Shop,	67	Fortieth Convention of the National Warm Air Heating and Air Conditioning Association	Heating Code in Georgia, by Parker Lowell, December	74
by Donald C. Taylor, October	92	Stresses Selling, October	Heating Data from Housing Census, July	78
Dry Cleaning Shops Need Sheet Metal Fix- tures, by Ernest E. Zideck, December	68	Heat" Home, September 91	Heating Data from Housing Census, August Heating Data from Housing Census, October	
Duct Design, for Cooling and Heating, January	86	430 Stainless, How to Fabricate, April 72 Four Warm Air Systems Analyzed, by R. W.	Heating Data from Housing Census, November	
Duct Standardization Urged, January Duct System Design for a Two Story Home,	85	Roose and S. Konzo, August	Heating Data from Housing Census, December	66
by S. W. Reid, December	55	Four Ways to Convert from Gravity to Forced Warm Air, by T. A. Clark, June	Heating Homes with Warm Air Ceiling Panels, by R. W. Roose and S. Konzo, February	46
Duer, B. G., Dealer Sells the Farm Market, December	70	Four-Zone Warm Air System for New Church,	Heating, Housing Census Summarizes Warm	
Dust Collecting Systems, How to Design, by		Fresh Air Intakes, Why Modern Furnace In-	Air Heating Market, May Heating Men Make Good Use of Sales Train-	80
Ernest E. Zideck, September	94	stallations Must Have, by Frederick B.	ing, March	103
E		Morse, May	Heating, Panel-Convection — Another Mile- stone, by R. W. Roose and S. Konzo, April	68
		Fresh Air Intakes, by Frederick B. Morse,	Heating Problem Solved by Floor Panel-Con- vection System, by R. W. Roose and S.	
by Eugene O. Olson, October	56	May	Miles, Marth	0.0
Elbow, Making a Center Reverse Stack Elbow,			Heating Wholesaler Has Job Supplying Cool- ing Equipment, March	
by Hugh B. Reid, January Elbow, Making a 90 Deg. Rectangle to Round,	123	G	Heating with Perimeter Loop, Radial Systems,	
by Hugh B. Reid, February	64	Gichner, Lawrence E., Bright Metals for the	by S. Konzo, November	71
Elbow, Making a Reverse Transition Elbow, by Hugh B. Reid, August	88	White House, January	High Velocity Systems a Trend, January Home, Small, Effectively Cooled by 2 Hp Con-	121
Elbow, Making a Transition Elbow, by Hugh		Gichner, Lawrence E., Contractor Reviews Corrosion Film, July	densing Unit, July	-80
B. Reid, July Electrical Wiring Important Factor for Summer	96	Gichner, Lawrence E., Many "Roof Leaks" Due to Other Causes, December	Homes, Project Air Conditioning of, July Housing Census Heating Data, July	
Cooling Equipment, January	111	Gichner, Lawrence E., Skylights—an Upward	Housing Census Heating Data, August	
Pumps, by S. L. Pappas and F. R. O'Brien,		Trend, October 78	Housing Census Heating Data, October	
January	106	Gichner, Lawrence E., The Little Things That Save Shop Time, September	Housing Census Heating Data, November Housing Census Heating Data, December	
Equipment Can Become Realty, by Albert W. Gray, May	113	Gichner, Lawrence E., 318 Year Old Roofers,	Housing Census Summarizes Warm Air Heat-	
Estimating Cooling Loads, by H. C. Pierce,	60	August	ing Market, May	80
Estimating Forms Help Forecast Job Costs, by	00	Costs Little, Is Effective, November 69	Housing Census Useful to Warm Air Dealer, June	
N. J. Biddle, January	92	Gilkey, H. T., Measuring Actual Cooling Loads, September	How Cooling Was Added to Warm Air Sys- tem, April	90
Evaporative Condensers and Cooling Towers, Use of, June	56	Gilkey, H. T., 2 Hp Condensing Unit Cools Small Home Effectively, July	How Dealer Can Arrange Title I Loans, by	
Evaporative Condensers, Residential Cooling Equipment Available This Year, July	71	Government Contracts, How to Get on Lists	Arnold Kruckman, July	
Evaporative Coolers, Designing Pad Type, by		to Bid, by Arnold Kruckman, March 39	How Evaporative Cooling Works, by Robert S. Ash, July	58
Robert S. Ash, September	72	Air, by T. A. Clark, June	How to Calculate Overhead, by N. J. Biddle,	
Evaporative Coolers, How to Install, by Robert S. Ash, November	78	Gravity System Converted to Year 'Round Conditioning, November	How to Clean Air, April	76
Evaporative Coolers, How to Size, by Robert S. Ash, October	62	Gray, Albert W., Can Contract Allow for De-	How to Control Cooling Equipment, by S. W.	
Evaporative Coolers, Many Types of, by Robert		fault Costs?, December 72	Reid, August How to Design a Duct System for a Two Story	66
S. Ash, August Evaporative Coolers, Residential Cooling Equip-	72	Gray, Albert W., Indefinite Contract Is No Contract, April	Home, by S. W. Reid, December	55
ment Available This Year, May	73	Gray, Albert W., Installed Equipment Can Become Realty, May	How to Fabricate Type 430 Stainless, April How to Select Cooling Equipment, by S. W.	72
Evaporative Coolers, Selling, by Robert S. Ash, December	62	Gray, Albert W., Minor Breaches Don't Cancel	Reid, July	64
Evaporative Cooling, How It Works, by Robert		Gray, Albert W., Oral Guarantee to Pay May	How to Service Panel Type Filters, by Carl B. Rowe, November	60
S. Ash, July Exchange Ideas at Meetings, April	91	Be Void, October 91	How to Store Sheet Metal, July	104
Exhaust, Making a Fan-to-Exhaust Stack Boot	,.	Gray, Albert W., Partial Acceptance Invali- dates Contract, September	How to Weld Thin Sheets to Thick Materials, by Robert Thomas, December	60
Fitting, by Hugh B. Reid, October Exhaust Hood, Making an, with a Corner	96	Gray, Albert W., When Are Quoted Prices	Humidifying Warm Air Heating Systems, Oc-	
Angular Take-Off, by Hugh B. Reid, June	98	Gray, Albert W., When Are Installations Sub-	tober	66
		ject to Sales Tax?, June 102	I	
F		Gray, Albert W., When Can Dealer Be Sued for Damages?, July	Ideas, Exchange of Ideas at Meeting, April	01
Fabricating Type 430 Stainless, April	72	Gray, Albert W., When Can You Return De-	Improving the Efficiency of Oil Fired Equip-	91
Fan Characteristics Discussed, April	71	Gray, Albert W., When Is a Dealer Liable for	ment, by Eugene O. Olson, October	
Fan Speeds, What Happens When You Change?, March	68	Accidents?, August 102	Incinerators—New Market for Heating Deal- ers, December	
Fan-to-Exhaust Stack Boot Fitting, by Hugh B.	96	Gray, Albert W., When Is Notice to Agent Binding on Contractor?, March 101	Indefinite Contract Is No Contract, by Albert	
Reid, October	90	Gregerson, H. G., How Heat Wave Affects	W. Gray, April	103
December	70	Air Conditioning Sales and Service, January 91 Guarantee, Oral, to Pay May Be Void, by	Selling Perimeter Heating, Summer Cooling, March	93
Farms, More Sheet Metal Work Needed on Farms, by Arnold Kruckman, September	41	Albert W. Gray, October	Indoor Comfort, Schedule 1953 Conferences,	
Farrar, Larston D., Predict '54 a Good Year- Rising Costs a Challenge, November	41	u	Industrial Ventilation, May	105
Farrar, Larston D., 10 Steps to Better Customer		Н	Industry and Educators Meet to Talk Year-	93
Relations, September		"Hard to Heat" Home, Warm Air System for, by Herb Foss, September	Round Conditioning, June	92
R. W. Roose and S. Konzo, June		Heat Loss, How to Find, from Slab Floors and	Industry Answers a Misinformed Editor, Oc- tober	76
Field Tests, Continue Field Tests on Fuel Oils with Additive, January		Basement Walls, by Merl Baker, J. M. O'Byrne and A. M. Levy, January 96	Installed Equipment Can Become Realty, by	
Figuring Cooling Loads, by F. W. Deady,		Heat Pump, Figuring Costs of, March 63	Installing Ducts for Higher Pressures, by Law-	
August	56	Heat Pump Performance, August 80	rence O. Paul, January	112
Film on Corrosion Reviewed by Contractor, by	63	Heat Pumps, What's Energy Consumption of Residential Heat Pumps?, by S. L. Pappas	Installing Evaporative Coolers, by Robert S. Ash, November	78
Lawrence E. Gichner, July	82	and F. R. O'Brien, January 106	International Heating & Ventilating Exposi- tion, Program and Exhibitors, January	144
Filters, Panel Type, How to Service, by Carl	60	Heat Pumps, Residential Cooling Equipment Available This Year, June	tion, Program and Exhibitors, January,	• >>
B. Rowe, November Fixtures, Laundry Agencies—A Market for	00	Heat Wave, How Heat Wave Affects Air Con-	J	
Sheet Metal Fixtures, by Ernest E. Zideck,	88	ditioning Sales and Service, by H. G. Greg- erson, January	Job Costs, What Should You Charge to Job	
November	63	Heated Floor Slab, Test Performance of, by	Costs?, June	80
Floor Panel-Convection System Solves Heating		S. Konzo, December	Job-Time Saved, Pay Bonuses for, by Byron E. Courtney, September	100
Problem, by R. W. Roose and S. Konzo, March	64	System, by R. W. Roose and S. Konzo, July 62		
Forced Warm Air, Converting from Gravity to, by T. A. Clark, June	60	Heating and Cooling with Small Round Ducts, October	K	
Fort Worth Contractors' Plan Pays Its Own		Heating Basementless Homes with Warm Air,	Konzo. S., Comfort with Perimeter Loop Sys-	
Way, May	72	by R. W. Roose and S. Konzo, January 82	tems, September	64

Konzo, S., Complete Convection Panel Sys- tem—Another Step Forward, May	64	Merchandise Planning for the Summer Cooling Season, Editorial, May	55	Predict '54 a Good Year—Rising Costs a Challenge, by Larston D. Farrar, November	41
Konzo, S., Field-Testing Perimeter Heating	•••	Metal Panels Sheathe Large Building in 61/2		Prevent Stainless Steel Corrosion, by A. R.	
Konzo, S., Floor Panel-Convection System	70	Metals, Bright, for the White House, by		Stargardter, November Profits, Must Know Overhead to Gauge True	64
Solves Heating Problem, March	64	Lawrence E. Gichner, January	109	Profits, by N. J. Biddle, May	
Konzo, S., Four Warm Air Systems Analyzed, August	62	Michigan Convention Report, "Give Top- Notch Service," April	86	Project Homes, Air Conditioning of, July Protecting and Controlling Cooling Equipment,	100
Konzo, S., Heating a Slab Floor House with		Michigan State, Industrial Ventilation Confer-		by S. W. Reid, September	60
a Two Loop System, July Konzo, S., Heating Basementless Homes with	62	Minor Breaches Don't Cancel Contract, by		Public Relations, Editorial, September	55
Warm Air, January	82	Albert W. Gray, November		0	
Konzo, S., Heating Homes with Warm Air Ceiling Panels, February	46	Misguided Newspaper Editor, An Open Letter to, Editorial, October		Quoted Prices, When Are Quoted Prices Bind-	
Konzo, S., How Well Do Perimeter Systems		Misinformed Editor Answered by Warm Air		ing?, by Albert W. Gray, January	116
Heat a Slab Floor Home?, October Konzo, S., Panel-Convection Heating—Another	80	Morse, Frederick B., Why Modern Furnace In-		R	
Milestone, April	68	stallations Must Have Fresh Air Intakes,			
Konzo, S., Results of Heating with Perimeter Loop, Radial Systems, November	74	May	56	Radial, Perimeter Loop Systems, Results of Heating with, by S. Konzo, November	7-6
Konzo, S., Test Performance of Heated Floor		N		Radio-Equipped Trucks Provide Quick Service,	
Slab, December Kruckman, Arnold, Building Programs Mean	50	New Approaches to Warm Air Heating, Jan-		Radioactive Work Construction Ventilation	77
Business for Heating and Sheet Metal Men,	41	uary	100	Radioactive Work, Constructing Ventilation Systems for, by W. W. McIntosh, September	70
June	4)	New Way to Figure Cooling Loads, by F. W. Deady, August	56	Rains, E. M., A Bank Wears Stainless Steel, July	56
Title I Loans, July	43	Ninety Deg. Rectangle to Round Elbow, How		Realty, Installed Equipment Can Become Realty, by Albert W. Gray, May	20
Kruckman, Arnold, How to Get on Lists to Bid on Government Contracts, March	39	to Make, by Hugh B. Reid, February Not to Be Duplicated, January		Rectangle to Round Elbow, Making a 90 Deg.,	113
Kruckman, Arnold, "In's and Out's of Title I Loans, May	43	Notice to Agent Is Binding on Contractor		by Hugh B. Reid, February	64
Kruckman, Arnold, More Sheet Metal Work	4,	When?, by Albert W. Gray, March Novel Sidewalk Display Brings in Business,		Reid, Hugh B., How to Make a Perimeter Boot Fitting, September	80
Needed on Farms, September	41	by Robert F. Welch, March		Reid, Hugh, How to Make a Tapered Duct	00
Kruckman, Arnold, Pros and Cons of Decon- trol Being Discussed, January	39	Nutting, A., New Air Filter Code, September	56	Fitting, November	80
Kruckman, Arnold, Too Few Apprentices—a Problem for Industry, February	29	0		Elbow, January	123
Kruckman, Arnold, What Will Budget Cut	47	O'Bring F. B. William France Communication		Reid, Hugh B., Making an Exhaust Hood with a Corner Angular Take-Off, June	98
Mean to Heating and Sheet Metal Men?, April	47	O'Brien, F. R., What's Energy Consumption of Residential Heat Pumps?, January	106	Reid, Hugh B., Making a Fan-to-Exhaust Stack	
Kruckman, Arnold, When Do Title I Loans		O'Byrne, J. M., How to Find Perimeter Heat Loss from Slab Floors and Basement Walls,		Reid, Hugh B., Making a 90 Deg. Rectangle	96
Cover Cooling Installations?, October Kruckman, Arnold, Will New Agency Grant	41	January	96	to Round Elbow, February	64
More Small Business Loans?, August	43	Offset Fitting, Reversible, Simplified Method of Developing, by Hugh B. Reid, May	106	Reid, Hugh B., Making a Rectangular Transi- tion Elbow, July	96
L		Ohio Convention Report, "Exchange Ideas at		Reid, Hugh B., Making a Reverse Transition	88
		Meetings," April		Reid, Hugh B., Making a Round to Two Ovals	88
Large Building Sheathed in Metal Panels in 6½ Days, November	72	of, by Eugene O. Olson, October Oil Fired Equipment, Selecting and Servicing,		Y Branch, March	74
Large Sheet Metal Shop, Six-Point Program Insures Success for, April	84	by Eugene O. Olson, November	62	with One Straight Side, December	76
Laundry Agencies-A Market for Sheet Metal		Olson, Eugene O., Improving the Efficiency of Oil Fired Equipment, October		Reid, Hugh B., Making a Three Way Y Branch with Equal Branch Diameters, April	82
Fixtures, by Ernest E. Zideck, November	88	Olson, Eugene O., Selecting and Servicing Oil		Reid, Hugh B., Simplified Method of Develop-	
Letterheads with "Oomph" Swing Sales, by W. Frank Welch, December	59	Olson, Norman R., Industrial Ventilation.		Reid, S. W., Controlling and Protecting Cool-	106
Levy, A. M., How to Find Perimeter Heat Loss from Slab Floors and Basement Walls,		May	95	ing Equipment, September	60
January		Open Letter to a Misguided Newspaper Editor, Editorial, October	55	Reid, S. W., How to Control Cooling Equip- ment, August	66
Loans, FHA Approves Central Residential Cooling Loans, April	79	Oral Guarantee to Pay May Be Void, by Albert	1	Reid, S. W., How to Design a Duct System for	
Loans, Will New Agency Grant More to Small		W. Gray, October Outfitting "Snack Bars on Wheels"—A Profit		a Two Story Home, December Reid, S. W., How to Select Cooling Equip-	55
Business?, by Arnold Kruckman, August Local Associations Play Important Role, No-	43	able Sheet Metal Sideline, by Robert F		ment, July	64
vember	68	Welch, January Overhead, How to Calculate, by N. J. Biddle		Reid, S. W., Year 'Round Conditioning for a Two Story Home, November	56
Logsdon, R. F., New Air Filter Code, September	56	February	60	Relations, Customer, How to Improve, by	-
Looking Over Overhead, Editorial, April		Overhead, Looking Over, Editorial, April Overhead Method, to Suit Your Needs Musi		Remodeling, "There's Money in Remodeling,"	68
Loop, Perimeter, Systems, by S. Konzo, September	64	Vary, by N. J. Biddle, March	76	by Robert F. Welch, September	86
Losses, To Avoid-First, Find Them!, Edi-		Overhead, Must Know Overhead to Gauge True Profits, by N. J. Biddle, May		Report on Furnace Sales in the Toledo Area, September	78
Lowell, Parker, Experience Shows Advantages	55	P		Research, ASHVE Reports \$2 Million for,	61
of Statewide Heating Code, December	74			March Residential Air Conditioning from Builder's	63
M		Packaged Central Units, Complete (Residentia Cooling Equipment Available This Year)		View, August	99
		March	52	Residential Cooling Equipment Available This Year (Complete Packaged Central Units),	
Making an Exhaust Hood with a Corner Angu- lar Take-Off, by Hugh B. Reid, June		Panel-Convection Heating—Another Milestone by R. W. Roose and S. Konzo, April	68	March Residential Cooling Equipment Available This	52
Making a Rectangular Transition 21bow, by		Pappas, S. L., What's Energy Consumption of	1	Year (Cooling Towers and Evaporative Con-	
Making a Reverse Transition Elbow, by Hugh	96	Partial Acceptance Invalidates Contract, by		densers), July	
B. Reid, August	88	Albert W. Gray, September	98	Year (Evaporative Coolers), May	73
Making a Round to Two Ovals Y Branch, by Hugh B. Reid, March		Paul, Lawrence O., Installing Ducts for Highe Pressures, January	112	Residential Cooling Equipment Available This Year (Heat Pumps), June	74
Making a Tapered Duct Fitting, by Hugh Reid,		Performance of Heat Pumps, August	. 80	Residential Cooling Equipment Available This	
November		Performance of Heated Floor Slab, by S Konzo, December		Year (Several Ways to Cool a Home), April Residential Cooling Is Our Job, Editorial,	
Straight Side, by Hugh Reid, December	76	Perimeter Boot Fitting, by Hugh B. Reid, Sep		December	49
Making a Three Way Y Branch with Equal Branch Diameters, by Hugh B. Reid, April.	82	Perimeter Heating Systems, Field-Testing, by	. 80	Restaurant Kitchen, Stainless Steel Tailored to Fit, October	61
Manual 11, New Way to Figure Cooling Loads, by F. W. Deady, August		R. W. Roose and S. Konzo, June	. 70	Restaurants, Sheet Metal in Restaurants and	
Market for Heating Dealers Provided by In-	56	Perimeter Loop, Radial Systems, Results o Heating with, by S. Konzo, November	74	Stores, by Ernest E. Zideck, August Results of Heating with Perimeter Loop, Radial	
door Incinerators, December	71	Perimeter Loop Systems, by S. Konzo, Sep		Systems, by S. Konzo, November	74
McIntosh, W. W., Constructing Ventilation Systems for Radioactive Work, September.	70	Perimeter Systems, How Well Do They Heat		Returning Defective Equipment, by Albert W. Gray, February	
McLain, Bruce H., Template Helps Dealer Lay		Slab Floor Home?, by S. Konzo, October	. 80	Reverse Transition Elbow, Making a, by Hugh B. Reid, August	
Out Year 'Round Systems, November Measuring Actual Cooling Loads, by H. T.	91	Pierce, H. C., "Don't 'Guesstimate' Cooling Loads," May	60	Reversible Offset Fitting, Simplified Method of	
Gilkey, D. R. Bahnfleth and R. W. Roose,	74	Plan for a Successful Shop, by Donald C Taylor, October		Developing, by Hugh B. Reid, May Role Played by Local Associations, November	106
September		rajion, wasself the transfer that the transfer to the transfer	76	risjed by Local Associations, reovember	08

Roof, Two Acres of Stainless Steel Roof, Jan-	Sizing Evaporative Coolers, by Robert S. Ash, October	62	2 Hp Condensing Unit Cools Small Home Effectively, by H. T. Gilkey, D. R. Bahn- fleth and R. W. Roose, July.	90
"Roof Leaks" Due to Other Causes, by Law- rence E. Gichner, December	Skylights—an Upward Trend, by Lawrence E. Gichner, October	78	Beth and R. W. Roose, July	80
Roofers, 318 Year Old Family, by Lawrence E. Gichner, August	Slab Floor House, Heating with a Two Loop System, by R. W. Roose and S. Konzo, July	62		
Roofing, Roll, Used as Ground Cover in Crawl Spaces, February	Slab Floors, How to Find Perimeter Heat Loss from, by Merl Baker, J. M. O'Byrne and		by N. J. Biddle, March	76
Roose, R. W., Complete Convection-Panel Sys- tem—Another Step Forward, May	A. M. Levy, January	96	Ventilation, Industrial, May Ventilation Systems for Radioactive Work, by	95
Roose, R. W., Field-Testing Perimeter Heating	Systems Heat?, by S. Konzo, October	80	W. W. McIntosh, September	70
Roose, R. W., Floor Panel-Convection System	by S. Konzo, December	50	w	
Roose, R. W., Four Warm Air Systems Ana-	with, October	100	Warm Air Heating Market Summarized by	
lyzed, August	Snack Bars, Outfitting, a Profitable Sheet Metal Sideline, by Robert F. Welch, January	98	Housing Census, May	80
with a Two Loop System, July	2 Spotlight on Warm Air Trends, April	97	Warm Air Heating Systems, How to Humidify, October	66
Roose, R. W., Heating Basementless Homes with Warm Air, January	Stainless Steel Corrosion, Prevention of, by A. R. Stargardter, November	64	Warm Air System for "Hard to Heat" Home, by Herb Foss, September	91
Roose, R. W., Heating Homes with Warm Air Ceiling Panels, February	Stainless Steel Tailored to Fit Restaurant Kitchen, October		Warm Air System, Four-Zone, for New Church, July	68
Roose, R. W., Measuring Actual Cooling	Stainless Steel Used in Bank Building, by E. M. Rains, July	,	Warm Air System, How Cooling Was Added,	80
Roose, R. W., Panel-Convection Heating—	Stainless Steel Welds, Curing Corrosion at,	,	Warm Air Systems Analyzed, by R. W. Roose	
Roose, R. W., 2 Hp Condensing Unit Cools	Stargardter, A. R., Prevent Stainless Steel	. 77 I	Warm Air Trends, Spotlight on, April	97
	Statewide Heating Code, by Parker Lowell	. 64	Water Cooled Condensers, How They Work,	68
Hugh B. Reid, March	4 December	. 74	Water-Cooled Summer Air Conditioners, Ad-	00
Rowe, Carl B., How to Service Panel Type Filters, November	Stores, Sheet Metal in Restaurants and Stores by Ernest E. Zideck, August		Welch, Robert F., Novel Sidewalk Display	95
c	Storing Oil in Old Slate Pits, October Storing Sheet Metal, July		Brings in Business, March	78
S	Straight Sided Duct Section, by Hugh Reid		Welch, Robert F., Outfitting "Snack Bars on Wheels"—A Profitable Sheet Metal Sideline,	
Sales Are Swung by Letterheads with "Oomph," by W. Frank Welch, December	December Success Insured for Large Sheet Metal Shop by		Welch, Robert F., "There's Money in Re-	
Sales Tax, When Are Installations Subject to?,	Six-Point Program, April	. 84	modeling," September	
by Albert W. Gray, June	by Donald C. Taylor, October		Swing Sales, December	59
ing Men, March 1	Olay, July	. 108	Welch, W. Frank, Your Ads Should Suit You, December	93
September 111111111111111111111111111111111111	Summer Cooling (Editorial), "Get Into Sum mer Cooling," August	. 82	Welding, Curing Corrosion at Stainless Steel Welds, September	77
Seeing the Show, February Selecting and Servicing Oil Fired Equipment,	Supplying Cooling Equipment Is Job for Heat	*	Welding Thin Sheets to Thick Materials, by Robert Thomas, December	
by Eugene O. Olson, November	ing Wholesalers, March	. 6)	What Happens When You Change Fan	1
	64 T		Speeds?, March	
	72 Talk Hot and Cold, June	79	When Are Installations Subject to Sales Tax?, by Albert W. Gray, June	
	Tapered Duct Fitting, How to Make, by Hug Reid, November	h . 80	When Are Quoted Prices Binding?, by Albert	t
Selling Evaporative Coolers, by Robert S. Ash,	Tapered Duct Section with One Straight Side		When Can Dealer Be Sued for Damages?, by	
Selling the Farm Market, by B. G. Duer,	Taylor, Donald C., Double-Barreled Plan fo	E	Albert W. Gray, July	108
Selling Stressed at 40th Convention of the	70 a Successful Shop, October		by Albert W. Gray, February	58
National Warm Air Heating and Air Condi-	Systems, by Bruce H. McLain, November. Ten Steps to Better Customer Relations, b	. 91	When Is Notice to Agent Binding on Con- tractor?, by Albert W. Gray, March	101
Selling and Training Is Accented at Contrac-	Larston D. Farrar, September	. 68	White House, Bright Metals for, by Lawrence E. Gichner, January	109
Servicing, Give Your Best, April	"Thar's Gold Behind Those Doorbells," Jun Thomas, Robert, How to Weld Thin Sheets t		Will New Agency Grant More Small Business Loans?, by Arnold Kruckman, August	
Servicing Oil Fired Equipment, by Eugene O. Olson, November	Thick Materials, December	. 60	Win Public Support for the Sheet Metal In-	
Servicing Panel Type Filters, by Carl B. Rowe,	ner, August	. 78	Wisconsin Convention Report, Spotlight on	
Several Ways to Cool a Home (Residential	Three Way Y Branch with Equal Branc Diameters, by Hugh B. Reid, April	h . 82	Warm Air Trends, April	. 97
Cooling Equipment Available This Year), April	60 Title I Loans, How Dealer Can Arrange, b	у	Work for Sheet Metal Men, August	95
Sheet Metal Fixtures Needed by Dry Cleaning Shops, by Ernest E. Zideck, December	Title I Loans, "In's and Out's" of, b	у	Y	
Sheet Metal, How to Store, July		R	Y Branch, Making a Round to Two Ovals, by	
Sheet Metal in Restaurants and Stores, by Ernest E. Zideck, August	Installations?, by Arnold Kruckman, October 76 Toledo, A Report on Furnace Sales in, Ser		Y Branch, Three Way, with Equal Branch Diameters, by Hugh B. Reid, April	3
Sheet Metal Work Needed on Farms, by	tember	. 78	Year 'Round Conditioning for a Two Story	
Arnold Kruckman, September Sheets, How to Weld Thin Sheets to Thick	41 Top-Notch Service, April		Home, by S. W. Reid, November	. 56
Materials, by Robert Thomas, December	tors Meeting, March	. 94	cators Meet to Talk About, June	. 92
Shop Efficiency, How It Can Be Improved, January	19 July	. 96	Zideck, Ernest E., Dry Cleaning Shops Need Sheet Metal Fixtures, December	. 68
Shop Time, Saving, by Lawrence E. Gichner,	Trends in Warm Air, April		Zideck, Ernest E., How to Design Dust Collect ing Systems, September	
Six and One-Half Days to Sheathe Large Build-	by Lawrence E. Gichner, November	. 69	Zideck, Ernest E., Laundry Agencies-A Mar	
ing with Metal Panels, November Six-Point Program Insures Success for Large	Two Story Home, Year 'Round Conditioning	ag.	ket for Sheet Metal Fixtures, November Zideck, Ernest E., Sheet Metal in Restaurant	
Sheet Metal Shop, April	84 for, by S. W. Reid, November	. 56	and Stores, August	